

REMARKS/ARGUMENTS

Reconsideration of the present application, as amended, is respectfully requested.

A. REJECTIONS UNDER 35 U.S.C. §112, SECOND PARAGRAPH

Claims 12 and 14 have been amended to address the informalities noted by the Examiner. Support for the change to claim 12 relating to the polymeric character of the hybrid material is described in the specification, beginning on page 3 in the sentence which bridges page 7 and 8, through page 8, line 4. Applicants agree with the Examiner's assessment that a composite is meant. Claim 14 has been amended to read as a "product by process" type claim. It is urged that the claims are now in proper form and that all rejections under 35 USC §112 can be removed. Support for new claim 20 can also be found in the specification. See, for example, the paragraph bridging pages 5 and 6 as well as and claims 1, 3 and 7, as filed, with the application.

B. THE INVENTION

As amended, the claimed invention provides coating compositions which overcome problems associated with the prior art. See page 2 of the specification, beginning at line 15. One problem that the invention solves relates to the immiscibility of layered inorganic fillers and polymeric systems in diluents. In order to achieve homogeneous dispersion of the filler through the composition of the invention, the surface of the layered inorganic filler is modified such that only one ionic group of a modifier that has at least two ionic groups interacts with the surface of the filler. If the filler is an anionic clay, one of the ionic groups, that is the anionic group of the modifier, will interact with the clay. This renders the surface of the filler loaded with (unreacted) cationic groups. As a result, the filler particles repel each other, hence the improved homogeneous dispersion. In the alternative aspect of the invention, when the filler is a cationic clay, the ionic group that is cationic will interact with the clay. This renders the surface of the filler loaded with (unreacted) anionic groups, and, again, the filler particles repel each other. This principle is not only effective in the case of layered double hydroxides (anionic clay), but also for cationic clays.

Another problem that the claimed invention solves relates to the disturbance of the curing process by the filler. The inventors have now found that if one of the ionic groups of the modifier does not bind to the filler, the curing process is not disturbed.

C. REJECTIONS UNDER 35 U.S.C. §102(b) and (e)

One pages 3-6 of the Office Action, the Examiner has rejected the subject matter of various groups of claims as being anticipated under 35 USC § 102 (b) and (e) by each of Oswald, Lan and Claudberg. As the Examiner will appreciate, a rejection under either of the cited sections of 35 U.S.C. § 102 requires that all of the elements of the rejected claims be found within each of the cited references. It is respectfully urged that the claims as presented herein are not anticipated by any of the references relied upon by the Examiner. Specifically, none of the prior art documents discloses the modification of a layered double hydroxide with a modifier comprising at least two ionic moieties wherein at least one of which is anionic. The Examiner is specifically directed to her comments concerning the allowable subject matter beginning on page 9 of the office action. Applicants have avoided making detailed arguments concerning the prior art at this time in view of the comments made by the Examiner and the amendments made to the independent claims. If it is determined that the amendments made herein do not place the application in condition for allowance, Applicants reserve the right to provide the Examiner with a detailed rebuttal of any rejection which is maintained. It is respectfully urged that the amended claims distinguish over each and every reference and that the rejections can be withdrawn.

D. REJECTIONS UNDER 35 U.S.C. §103

On pages 6-9 of the Office Action, the Examiner has rejected the subject matter of certain claims under 35 U.S.C. §103(a), as being unpatentable over previously mentioned Lan in view of Oswald regarding claims 5, 6 and 13 and over Lan in view of Oswald concerning claim 10.

Applicants respectfully traverse the rejection of the Examiner in view of the amendments made herein and the Examiner's comments concerning allowable subject matter. It is urged that a proper *prima facie* case of obviousness cannot be made by the Examiner as a result of the present amendment. It is respectfully urged that neither combination of art relied upon by the Examiner provides the requisite teachings required to render the claims obvious. The art must suggest how to apply its teachings to the specifically claimed invention.

In view of the foregoing, it is believed that the rejections under 35 U.S.C § 103 can be removed.

E. FEES

This response is being filed with a Petition for a Two Month Extension of Time and required fee. No further fee is believed to be due. If, on the other hand, it is determined that any further fees are due or any overpayment has been made, the Assistant Commissioner is hereby authorized to debit or credit such sum to deposit account 02-2275.

Pursuant to 37 C.F.R. 1.136(a)(3), please treat this and any concurrent or future reply in this application that requires a petition for an extension of time for its timely submission as incorporating a petition for extension of time for the appropriate length of time. The fee associated therewith is to be charged to Deposit Account No. 02-2275.


F. CONCLUSION

In view of the actions taken and arguments presented, it is respectfully submitted that each and every one of the matters raised by the Examiner have been addressed by the present amendment and that the present application is now in condition for allowance.

An early and favorable action on the merits is earnestly solicited.

Respectfully submitted,

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